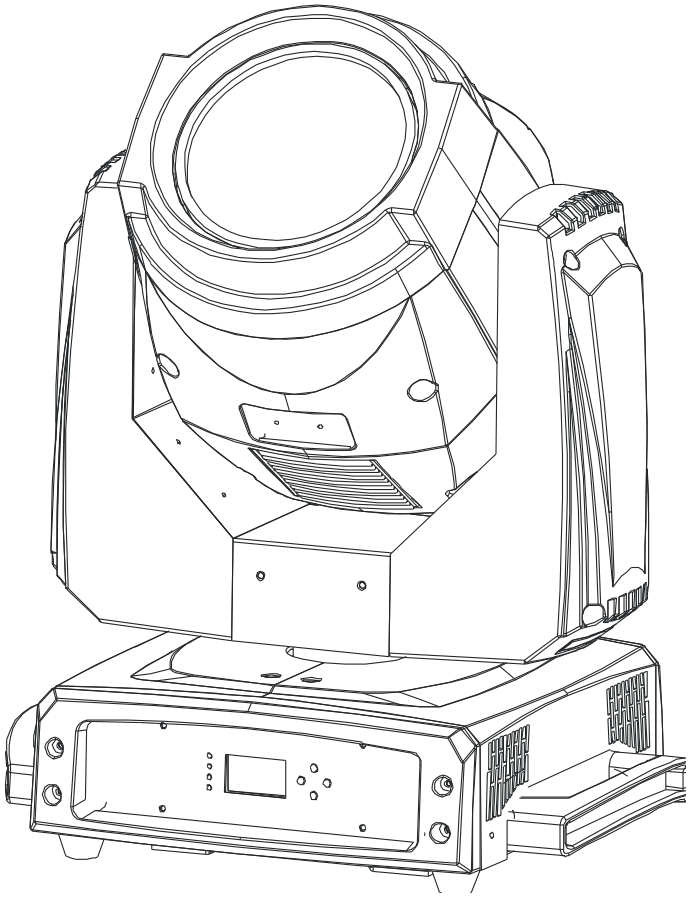
FOCUS®

PANTHER 15R BEAM



USER MANUAL

Please read these instructions carefully before use

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1. Safety Instruction

WARNING

Please read carefully the instruction manual, which includes important information about the installation, usage and maintenance.

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction manual.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

- Unpack and check carefully that there is no transportation damage before using the unit.
- The unit is for indoor use only. Use only in a dry location.
- Do install and operate by qualified operator.
- Do not allow children to operate the fixture.
- Use safety chain when fixing the unit. Handle the unit by carrying its base instead of head only.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces.
- Be sure that no ventilation slots are blocked; otherwise the unit will be overheated.
- Before operating, ensure that the voltage and frequency of power supply matches the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- Maximum ambient temperature TA: 40℃. Don't operate it when the temperature is higher.
- Don't connect the device to any dimmer pack.
- During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, and it will decrease gradually within 15 minutes.
- Make sure there are no flammable materials close to the unit while operating to avoid fire hazard.
- Examine the power wires carefully; replace them immediately if there is any damage.
- Unit's surface temperature may reach up to 85℃. Don't touch the housing bare-handed during its operation, and allow about 15 minutes for cooling the unit down before replacing bulb or maintenance as it could be very hot.
- Avoid any inflammable liquids, water or metal objects entering the unit. Once it happens, cut off the mains power immediately.

- Do not operate in dirty or dusty environment; do clean the fixture regularly.
- Do not touch any wire during operation as there might be a hazard of electric shock.
- Avoid power wires twist other cables.
- The minimum distance between light output and the illuminated surface must be more than 12 meters.
- Disconnect mains power before fuse/lamp replacement or servicing.
- Replace fuse/lamp only with the same type.
- In the event of serious operating problem, stop using the unit immediately.
- Never turn on and off the unit time after time.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.
- Do not open the unit as there are no user serviceable parts inside.
- Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center if needed.
- Disconnect the mains power if the fixture is has not been used for a long time.
- Do use the original packing materials before transporting it once again.
- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- Hot lamp explosion hazard. Do not open the unit within 15 minutes after switching off.
- Do replace the bulb once it is damaged, deformed or life-expired.
- Do not look directly at the light while the bulb is on.
- Never touch bulb with bare fingers, as it is very hot after using.
- Do not start on the unit without bulb enclosure or when housing is damaged.

2. Technical Specification

Power supply

- AC 100~240V, 50/60Hz

Power Consumption

- 500W

Lamp

- PHILIPS MSD Platinum 15R (800K)

Battery backup display

- Setting DMX address or other functions without connecting to mains power.
- Battery for LCD display charges automatically when the fixtures connects to the mains power.
- No need to change battery.

Optical system

- High efficient Optical system.
- Delivering extremely powerful output.
- High quality lens.

Movement

- Pan: 540°
- Tilt: 270°
- Pan/Tilt moving speed adjustable.
- Automatic Pan/Tilt correction.
- Easy calibration and maintenance by magnetic home positioning.
- Pan/Tilt position lock for transporting protection.

Dimmer/Shutter

- Mechanical dimmer
- Mechanical shutter and adjustable speed strobe effect

Color wheel

- Color wheel: 12 fixed colors
- Rainbow effect in both directions.
- Easy calibration and maintenance by magnetic home positioning.

Gobo wheel

- Gobo Wheel: 12 rotation gobos, index able,

- Easy calibration and maintenance by magnetic home positioning.

Focus: Electronic

Cooling:

- Fan cooling

Protocols

- DMX 512

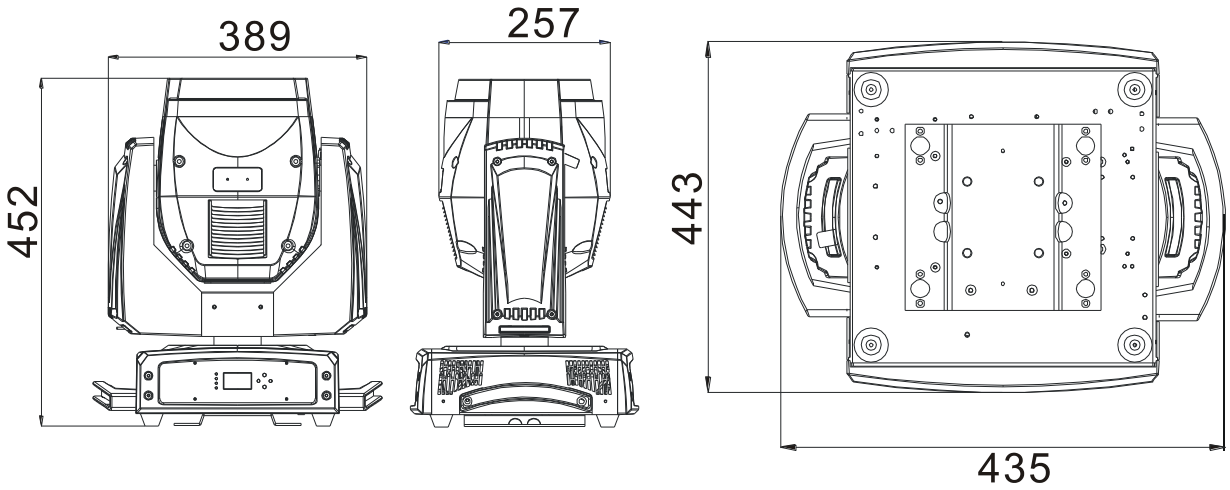
- Data input/output: 3⁄5 Pin XLR socket

Dimension

- 435×443×452mm

Weight

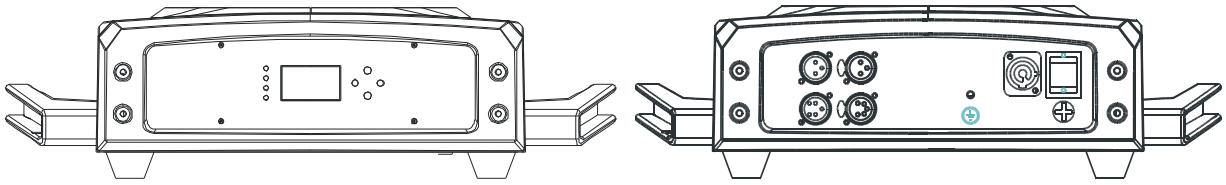
- 22.2kg



3. Description

3.1 Control Panel

Front view **Rear view**



Monitor (Batter Back-up display):

LED:

POWER	On	Power On
BATTERY	On	Battery States
LAMP	On	Lamp On
DMX	Om	DMX input present

Button:

MENU	To enter into, move backward or leave the menu
▲ **UP**	Move up in the menu
▼ **DOWN**	Move down in the menu
ENTER	Enter the desired functions

DMX input/output:

For DMX 512 operation, use 3/5-pin XLR plug cable to link the units together

Fuse (T 10A):

Protect the unit from damage of over current.

Power Cable:

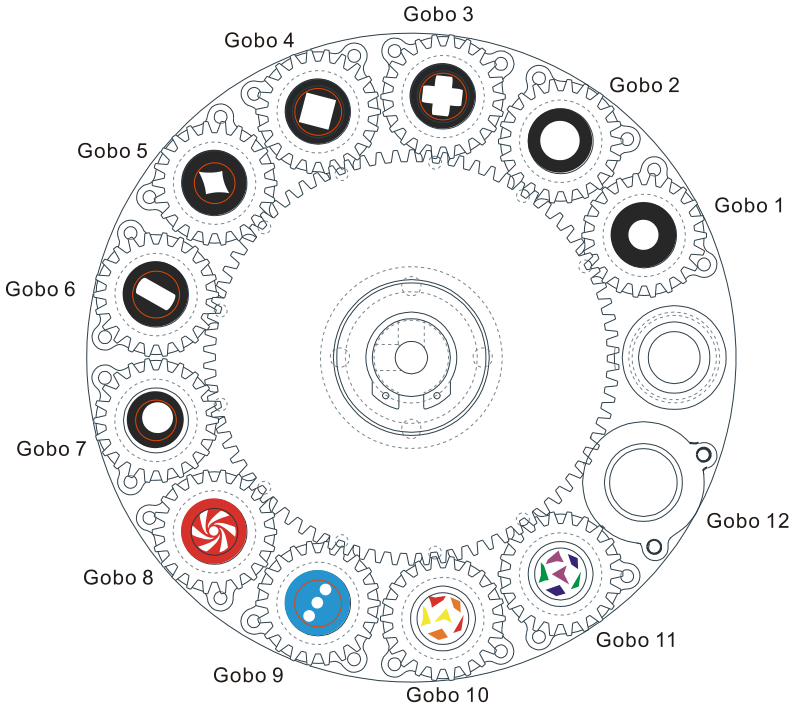
Connect to the mains supply

Power Switch:

Turns On/Off the power

4. Gobo-wheel and Lamp

4.1 Gobo-wheel



DANGER!

Install/change the gobo-wheel with the device switched off only.

4.2 Lamp

Philips MSD Platinum 15R (8000K)

- Because of its high internal pressure, there might be a risk that the Discharge lamp would explode during operation. The lamp emits intense UV radiation which is harmful to the eyes and skin. The high luminance of the arc can cause severe damage to the retina if you take a close look at the lamp.
- To protect the lamp, always turn off the lamp first (via control panel or DMX controller) and let the unit run at least five minutes to cool down before switching off the mains supply. Never handle the lamp or luminary when it is hot.

- Do not touch the bulb with bare hands. If this happens, clean the lamp with denatured alcohol and wipe it with a lint free cloth before installation.
- The lamp generates UV radiation. Never operate the lamp without appropriate shielding.
- When lighting up, the lamp operates at high pressure and there is a slight risk of arc tube rupture. The risk increases with age, temperature and improper handling of the lamp. Do not use the lamp longer than its lifespan.
- Make sure the lamp is located in the center of the reflector for the best projection.

4.3 Change the Lamp

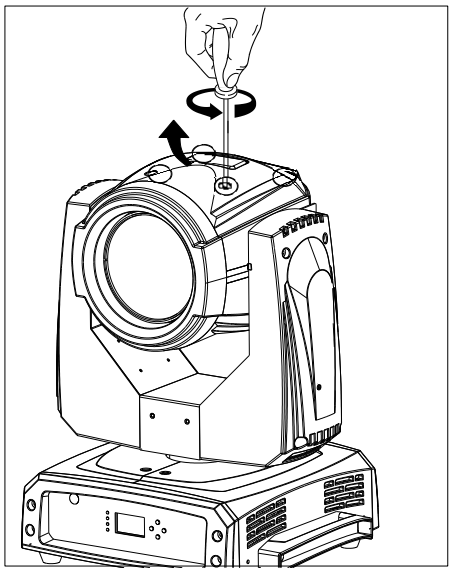


Fig1.

Fig.1 Use 1/4 Turn to loosen the four screws and open the cover.

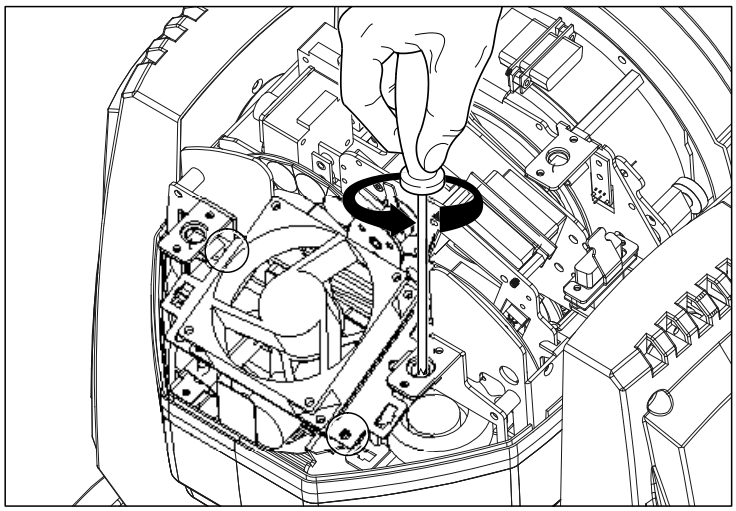


Fig2.

Fig.2 Use 1/4 Turn loosen the screws and take out the fan.

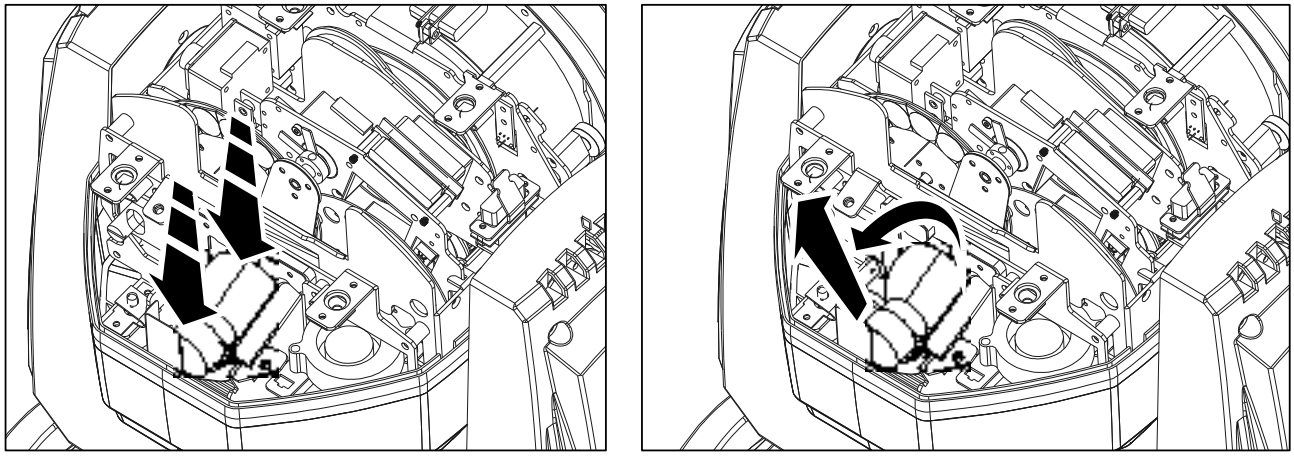


Fig.3

Fig.3 Take away the old lamp.

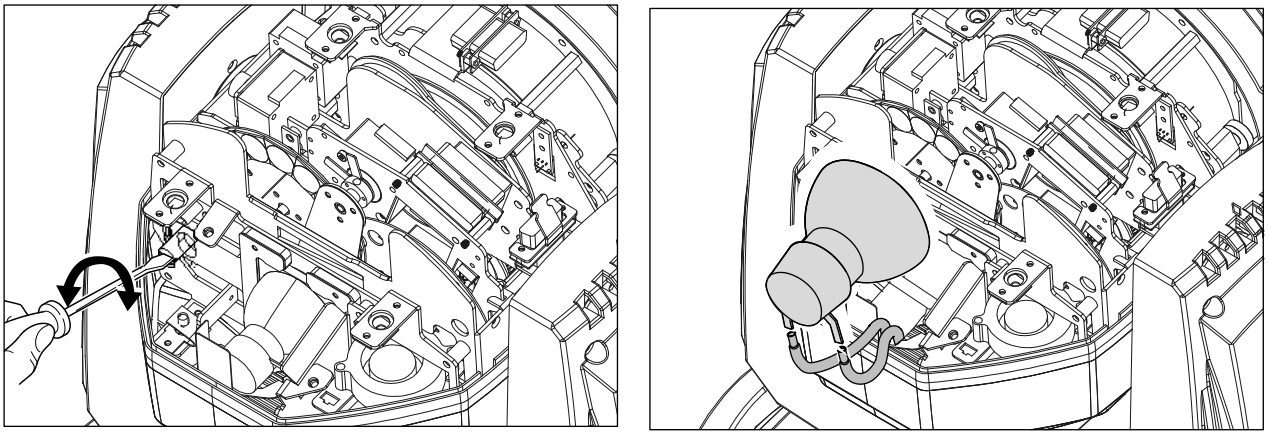


Fig.4

Fig.4 Unplug all the connect wires over the lamp and wear anti-static gloves to take on the lamp. And then change a new lamp.

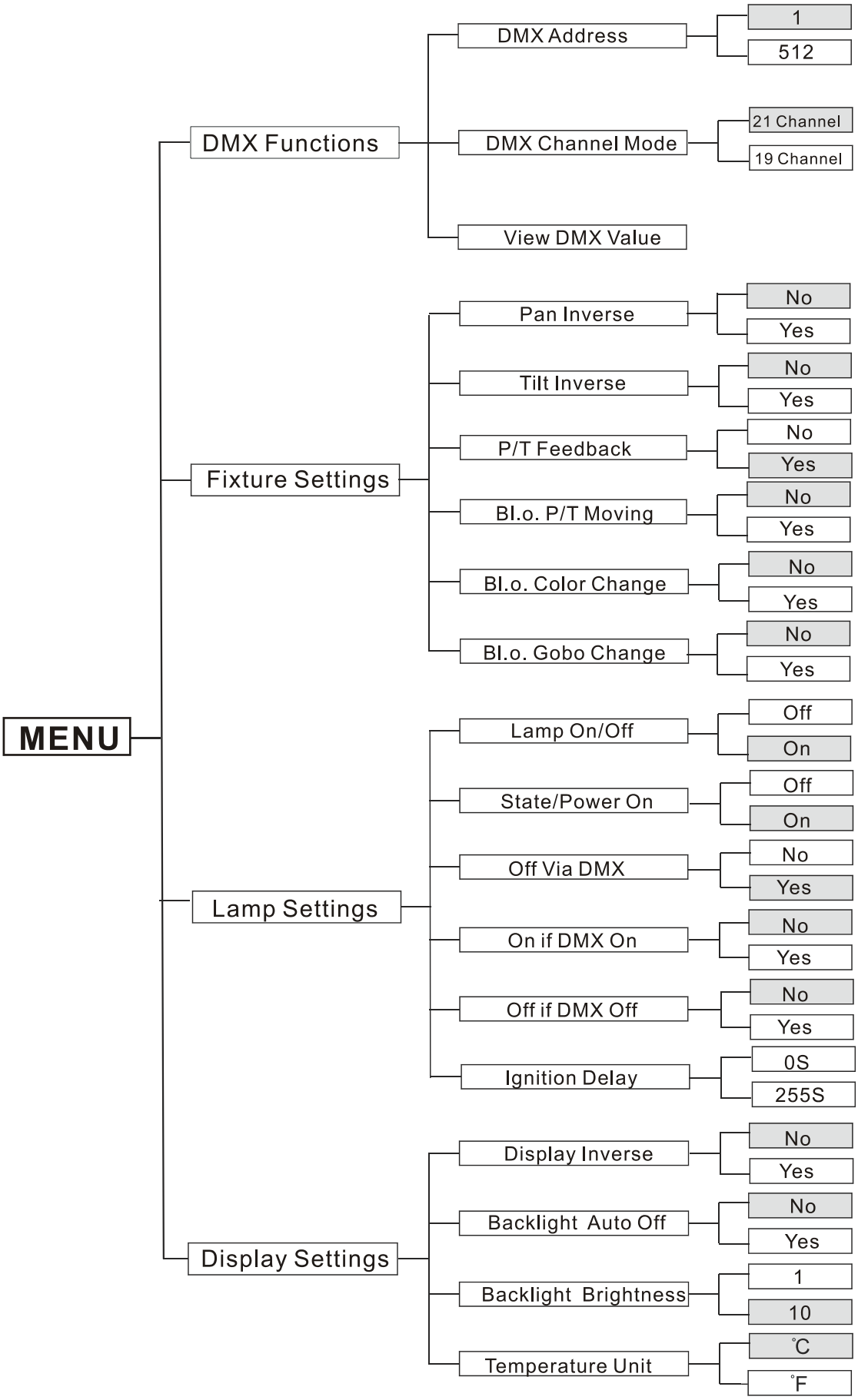
5. How To Set The Unit

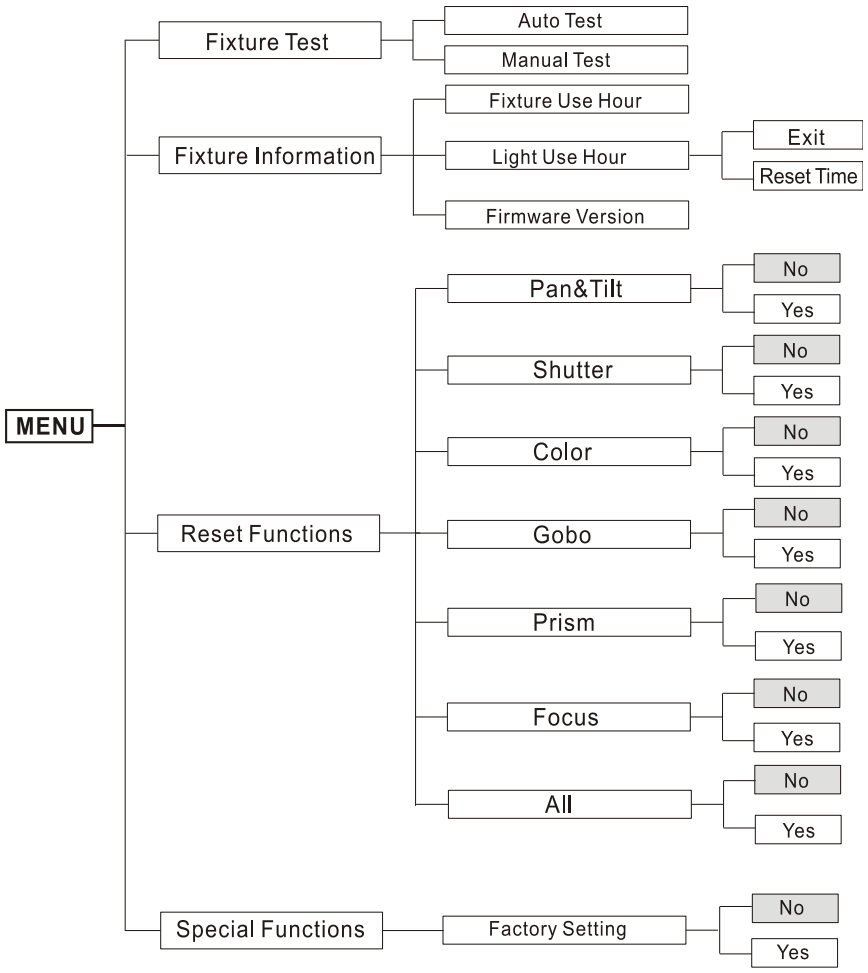
5.1 Main Function

Turn on the unit, press **MENU** button into menu mode, press **UP** and **DOWN** button until the required function is shown on the monitor. Select the function by **ENTER** button. Use **UP** and **DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press **MENU** button or let the unit idle one minute to exit menu mode.

In the event of disconnecting with mains power, press **UP** button for one minute to enter into menu mode. Press MENU button or let the unit idle one minute to exit.

The main functions are shown below（the grayed boxes are preset settings）:


MENU
DMX Functions
DMX Address
1
512
DMX Channel Mode
21 Channel
19 Channel
View DMX Value
Fixture Settings
Pan Inverse
No
Yes
Tilt Inverse
No
Yes
P/T Feedback
No
Yes
Bl.o. P/T Moving
No
Yes
Bl.o. Color Change
No
Yes
Bl.o. Gobo Change
No
Yes
Lamp Settings
Lamp On/Off
Off
On
State/Power On
Off
On
Off Via DMX
No
Yes
On if DMX On
No
Yes
Off if DMX Off
No
Yes
Ignition Delay
0S
255S
Display Settings
Display Inverse
No
Yes
Backlight Auto Off
No
Yes
Backlight Brightness
1
10
Temperature Unit
°C
°F



DMX Functions

Enter menu mode, select ***DMX Functions***, press ENTER button to confirm, use UP and DOWN button to select ***DMX Address, DMX Channel Mode*** or ***View DMX Value***

DMX Address *- DMX512 address setting*

Select **DMX Address**, press ENTER button to confirm, the present address will blink on the display, use UP and DOWN button to adjust the address from **1** to **512**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

DMX Channel Mode *- channel mode*

Select **DMX Channel Mode**, press ENTER button to confirm, present channel mode will blink on the display, use UP and DOWN button to select **21 Channel** or **19 Channel** Mode, press

ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

View DMX Value

Select **View DMX Value**, press ENTER button to confirm. Channel function and its value will show on the display, use UP and DOWN button to view other DMX value. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Setting

Enter menu mode, select ***Fixture Setting,*** press ENTER button to confirm, use UP and DOWN button to select ***Pan Inverse, Tile Inverse, BL.O. P/T Moving, BL.O. Color Change or BL.O. Gobo Change.***

Pan Inverse

Select **Pan Inverse**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal) or **Yes** (pan inverse), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Tilt Inverse

Select **Tilt Inverse**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal) or **Yes** (tilt inverse), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

P/T Feedback *— pan/tilt Feedback*

Select **P/T Feedback**, press ENTER button to confirm, present mode will blink on the display, press UP/DOWN button to select **No** (Pan or tilt's position will not feedback while out of step.) or **Yes** (Feedback while pan/tilt out of step.), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. P/T Moving *- Blackout while pan/tilt moving*

Select **BL.O. P/T Moving**, Press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal while pan/tilt moving) or **Yes** (blackout

while pan/tilt moving), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. Color Change *- Blackout while change color*

Select **BL.O. Color Change**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal while change color) or **Yes** (blackout while change color), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

BL.O. Gobo Change *- Blackout while change gobo*

Select **BL.O. Gobo Change**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal while changing gobo) or **Yes** (blackout while changing gobo), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Lamp Setting

Enter menu mode, select ***Fixture Setting***, press ENTER button to confirm, use UP and DOWN button to select **Lamp** ***On/Off, State/Power on, Off Via DMX, On if DMX on, Off if DMX off, Cooling Mode*** or ***Ignition Delay.***.

Lamp On/Off *- Turn on/off the lamp*

Select **Lamp On/Off**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **Off** (lamp off) or **On** (lamp on), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

State/Power On *- Lamp state while power on*

Select **State/Power On**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **Off** (Lamp off while power on) or **On** (Lamp on while power on), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Off Via DMX *- Turn off the unit via DMX controller*

Select **Off Via DMX**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **Yes** (turn off the unit via DMX controller available) or **No** (turn off the unit via DMX controller impracticable), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

(When you operate the unit via DMX controller, set the value of channel "special function" to "lamp off", waiting for 5 seconds, then the lamp will be off if you choose "yes" mode).

On If DMX On **-** Lamp turns on when DMX signal is detected

Select **On If DMX On**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **Yes** (Lamp turns on when DMX signal is detected) or **No** (keep the present state), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode *(If the lamp is off via DMX signal, you can reconnect the DMX controller to make the lamp on).*

Off If DMX Off **-** Lamp turns off when DMX signal is cut off

Select **Off If DMX Off**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **Yes** (Lamp turns off when DMX signal is cut off), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Ignition Delay *- Delay time between power on and lamp on*

Select **Ignition Delay**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to adjust the delay time from 0S to 255S, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Display Setting

Enter menu mode, select ***Display Setting***, press ENTER button to confirm, use UP and DOWN button to select ***Display Inverse, Backlight Auto Off, Backlight Intensity*** or ***Temperature unit.***

Display Inverse

Select **Display Inverse**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (normal display) or **Yes** (inverse display), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Auto Off

Select **Backlight Auto Off**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select **No** (display always on) or **Yes** (display goes off one minute after exiting menu mode), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Backlight Brightness

Select **Backlight Brightness**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to adjust backlight intensity from **1** (dark) to **10** (bright), press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Temperature Unit

Select **Temperature Unit**, press ENTER button to confirm, present mode will blink on the display, use UP and DOWN button to select ℃ or ℉, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Fixture Test

Enter menu mode, select ***Fixture Test***, press ENTER button to confirm, use UP and DOWN button to select ***Auto Test*** or ***Manual Test***

Auto Test

Select **Auto Test**, press ENTER button to confirm, the unit will run built-in programs to automatically test pan, tilt, color, gobo, gobo rotation, shutter, dimmer, prism, prism rotation, focus, and lamp on/off. . Press MENU button back to the last menu or exit menu mode after

auto test.

Manual Test

Select **Manual Test**, press ENTER button to confirm, the present channel will show on the display, use Up and DOWN button to select channel, press ENTER button to confirm, then use UP and DOWN button to adjust the value, press ENTER button to store, the fixture will run as the channel value indicates. Press MENU button back to the last menu or exit menu mode let the unit idle one minute.

(All channels value will become 0 after exiting Manual Test menu)

Fixture Information

Enter menu mode, select ***Fixture Information***, press ENTER button to confirm, use UP and DOWN button to select ***Fixture Use Hour, Light Use Hour*** or ***Firmware Version.***

Fixture Use Hour

Select **Fixture Use Hour**, press ENTER button to confirm, fixture use time will show on the display, press MENU button to exit.

Light Use Hour

Select **Light Use Hour**, press ENTER button to confirm, lamp on time will show on the display, press ENTER button to confirm, use UP and DOWN button to select **Exit** or **Reset Time**, press ENTER button to confirm. Press MENU button back to the last menu or exit menu mode let the unit idle one minute.

Firmware Version

Select **Firmware Version**, press ENTER button to confirm, firmware version will show on the display, press MENU button back to exit.

Reset Functions

Enter menu mode, select ***Reset Function***, press ENTER button to confirm, use UP and DOWN button to select ***Pan&Tilt, Shutter, Color, Gobo, Prism, Focus*** or ***All.***

Pan & Tilt - *Reset Pan and Tilt*

Select **Pan & Tilt**, press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset pan and tilt to their home positions) or **No**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Shutter - *Reset Shutter*

Select **Shutter**, press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset shutter to its home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Color - *Reset Color*

Select **Color**, press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset color to their home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Gobo - *Reset Gobo*

Select **Gobo**, press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset GOBO wheel to their home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Prism - *Reset Prism*

Select **Prisms,** press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset prism to their home positions) or **No**, and press ENTER button to store. Press MENU button to exit.

Focus - *Reset Focus*

Select **Focus,** press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset Focus to their home positions) or **No**, and press ENTER button to store. Press MENU button to exit

All *- Reset All*

Select **All,** press ENTER button to confirm, use UP and DOWN button to select **Yes** (the unit will run built-in program to reset all motors to their home positions) or **No**, press ENTER button to store. Press MENU button to exit.

Special Functions

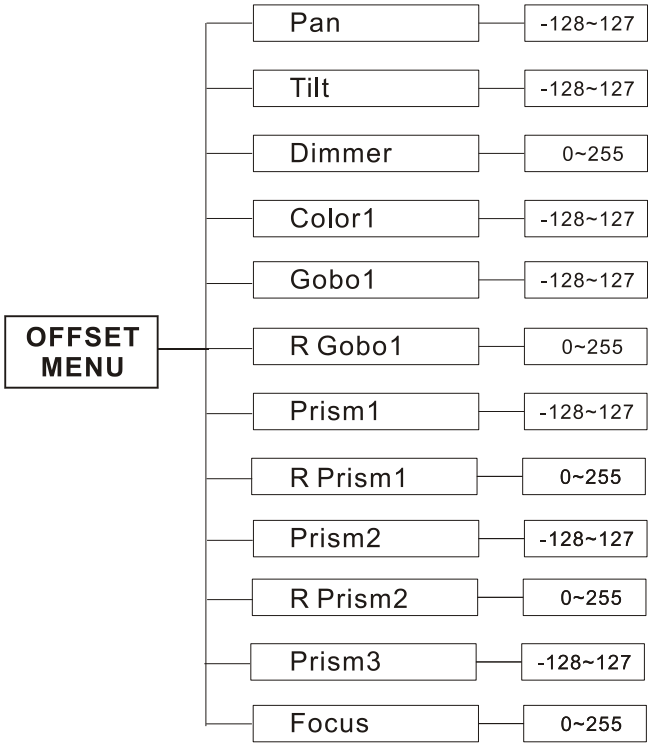
Enter menu mode, select ***Special Functions***, press ENTER button to confirm, select ***Factory Setting.***

Factory Setting

Select **Factory Setting**, press ENTER button to confirm, use UP and DOWN button to select the **No** or **Yes** (the fixture will reset to factory settings and exit menu mode.)

5.2 Home Position Adjustment

Press **MENU** button into menu mode, then press ENTER button for about 3 seconds into offset mode to adjust the home position. Select the function by **ENTER** button. Use **UP** and **DOWN** button to choose the submenu, press the **ENTER** button to store and automatically return to the last menu. Press MENU button to exit.



Pan *- pan home position adjustment*

Enter offset mode, Select **Pan**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Tilt *- Tilt home position adjustment*

Enter offset mode, Select **Tilt**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Dimmer *- Dimmer home position adjustment*

Enter offset mode, Select **Dimmer**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from 0 to 255, press ENTER button to store. Press MENU button to exit.

Color1 **-** *Color1 home position adjustment*

Enter offset mode, Select **Color1**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Gobo1 **-** *Gobo home position adjustment*

Enter offset mode, Select **Gobo1**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

R Gobo1 **–** *Gobo1 rotation home position adjustment*

Enter offset mode, Select **R Gobo1**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Prism1 **–** *Prism1 home position adjustment*

Enter offset mode, Select **Prism1**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from 0 to 255, press ENTER button to store. Press MENU button to exit.

R Prism1 **–** *Prism1 rotation home position adjustment*

Enter offset mode, Select **R Prism1**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Prism2 **–** *Prism2 home position adjustment*

Enter offset mode, Select **Prism2**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from 0 to 255, press ENTER button to store. Press MENU button to exit.

R Prism2 **–** *Prism2 rotation home position adjustment*

Enter offset mode, Select **R Prism2**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from -128 to 127, press ENTER button to store. Press MENU button to exit.

Prism3 **–** *Prism3 home position adjustment*

Enter offset mode, Select **Prism3**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from 0 to 255, press ENTER button to store. Press MENU button to exit.

Focus **-** *Focus home position adjustment*

Enter offset mode, Select **Focus**, press ENTER button to confirm, the present position will blink on the display, use UP and DOWN button to offset the value from 0 to 255, press ENTER button to store. Press MENU button to exit.

5.3 Error Information

Lamp Startup Fail

It appears when there is no lamp or some wires are damaged.

Temperature Sense Error

It appears when temperature check board is damaged.

Lamp Too Hot Power Off

It appears when temperature is detected higher than 110℃. Check if the unit is properly ventilated, or fans or temperature check board may is damaged.

Lamp Too Hot Low Power

It appears when temperature is detected higher than 105℃, the unit will run on a low power level.

Maintenance Fixture

It appears when the maintenance remaining time becomes 0S, please enter menu mode and reset the time.

Lamp On Over 700 Hour

It appears when the lamp has been on over 700 hours, please turn off the lamp.

Memory Initial Fail

It appears when the memory IC is damaged.

CPU-B Error, CPU-C Error, CPU-D Error

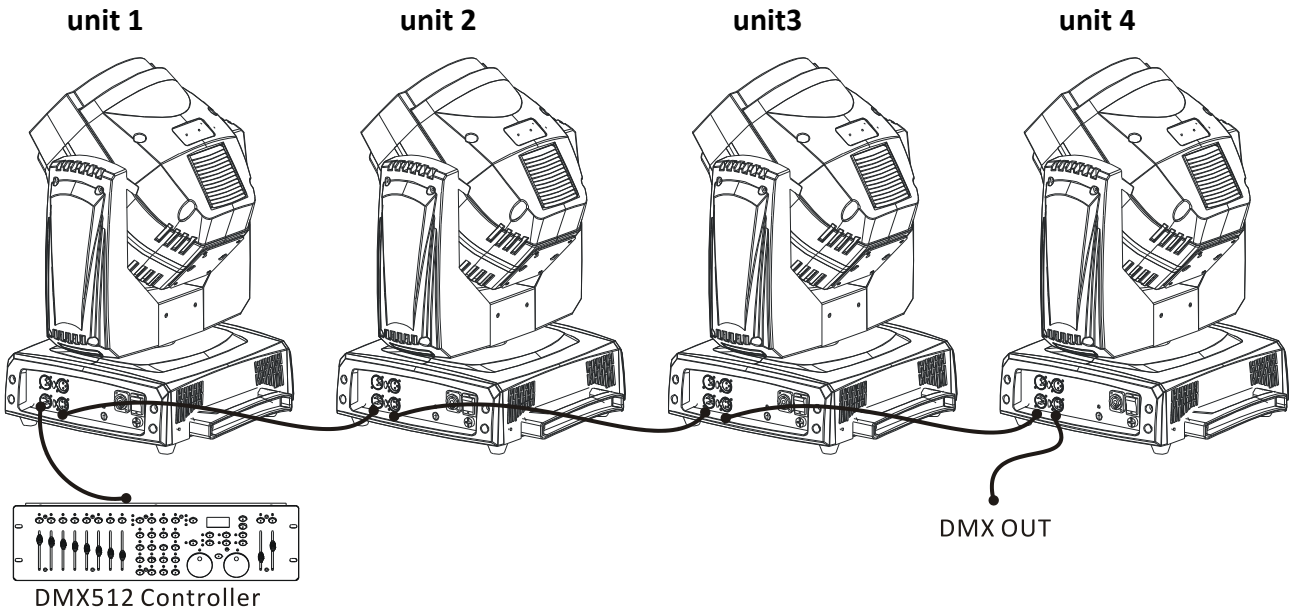
They appear when board P.C or some wires are damaged.

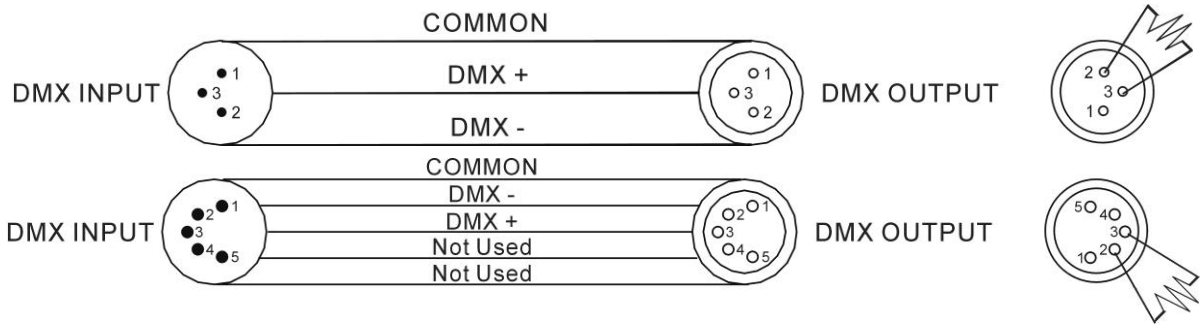
Pan Reset Error, Pan Encode Error, Tilt Reset Error, Tilt Encode Error, Shutter Reset Fail, Dimmer Reset Fail, Color Reset Fail, , Gobo Reset Fail, Focus Reset fail.

They may appear when turning on or resetting the unit, for some parts such as board P.C are damaged. Please contact the qualified maintenance.

6. Control By Universal DMX Controller

6.1 Connection





1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120-ohm 1⁄4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last unit.
2. Connect the unit together in a “daisy chain” by XLR plug cable from the output of the unit to the input of the next unit. The cable cannot be branched or split to a “Y” cable. DMX 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or corroded connectors can easily distort the signal and shut down the system.
3. The DMX output and input connectors are pass-through to maintain the DMX circuit, when one of the units’ power is disconnected.
4. Each lighting unit needs to have a DMX address to receive the data by the controller. The address number is between 0-511 (usually 0 & 1 are equal to 1).

5. The end of the DMX 512 system should be terminated to reduce signal errors.

6. 3 pin XLR connectors are more popular than 5 pins XLR.

   3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

   5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+), Pin4, Pin5 not used.

6.2 Channel Mode Setting

Enter menu mode, select ***DMX Functions***, press ENTER button to confirm, use UP and DOWN button to select **DMX Channel Mode**, press ENTER button to confirm, present channel mode will blink on the display, use UP and DOWN button to select **21 Channel** or **19 Channel Mode**, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

6.3 Address Setting

If you use a universal DMX controller to control the units, you have to set DMX address from 1 to 512 so that the units can receive DMX signal.

Press MENU button to enter menu mode, select ***DMX Functions***, press ENTER button to confirm, use UP and DOWN button to select ***DMX Address***, press ENTER button to confirm, the present address will blink on the display, use UP and DOWN button to adjust the address from 1 to 512, press ENTER button to store. Press MENU button back to the last menu or let the unit idle one minute to exit menu mode.

Please refer to the following diagram to address your DMX512 channel for the first 4 units.

Channel mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
19 channels	1	20	39	58
21 channels	1	22	43	64

6.4 DMX 512 Configuration

21 Channels Mode:

21 Channels Mode

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8	Ch9
Pan	Pan Fine	Tilt	Tilt Fine	P/T Speed	Function	P/T Macro	P/T Macro Speed	Color 1
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Fast 254 Slow 0 Fast	240-255 No Function 230-239 Lamp Off 220-229 Disable Blackout while P/T moving or Color change or Gobo change 210-219 Enable Blackout while P/T moving or Color change or Gobo change 200-209 Reset All 150-199 No Function 140-149 Pan/Tilt Reset 130-139 Lamp On 120-129 Disable Blackout while Gobo change 110-119 Enable Blackout while Gobo change 100-109 Disable Blackout while Color change 090-099 Enable Blackout while Color change 080-089 Disable Blackout while Pan/Tilt Move 070-079 Enable Blackout while Pan/Tilt Move 000-069 No Function	248-255 Marco31 240-247 Marco30 232-239 Marco29 224-231 Marco28 216-223 Marco27 208-215 Marco26 200-207 Marco25 192-199 Marco24 184-191 Marco23 176-183 Marco22 168-175 Marco21 160-167 Marco20 152-159 Marco19 144-151 Marco18 136-143 Marco17 128-135 Marco16 120-127 Marco15 112-119 Marco14 104-111 Marco13 096-103 Marco12 088-095 Marco11 080-087 Marco10 072-079 Marco9 064-071 Marco8 056-063 Marco7 048-055 Marco6 040-047 Marco5 032-039 Marco4 024-031 Marco3 016-023 Marco2 008-015 Marco1 000-007 No Marco	255 Slow 0 Fast	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 064-127 Index 059-063 Color12 054-058 Color11 049-053 Color10 044-048 Color9 039-043 Color8 034-038 Color7 030-033 Color6 025-029 Color5 020-024 Color4 015-019 Color3 010-014 Color2 005-009 Color1 000-004 White

Ch10	Ch11	Ch12	Ch13	Ch14	Ch15
Gobo 1	R-Gobo 1	Prism Marco	Prism1	R-Prism1	Prism2
255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 122-127 Gobo12 Shaking 117-121 Gobo11 Shaking 112-116 Gobo10 Shaking 107-111 Gobo9 Shaking 101-106 Gobo8 Shaking 096-100 Gobo7 Shaking 091-095 Gobo6 Shaking 086-090 Gobo5 Shaking 080-085 Gobo4 Shaking 075-079 Gobo3 Shaking 070-074 Gobo2 Shaking 064-069 Gobo1 Shaking 059-063 Gobo12 054-058 Gobo11 049-053 Gobo10 044-048 Gobo9 039-043 Gobo8 034-038 Gobo7 030-033 Gobo6 025-029 Gobo5 020-024 Gobo4 015-019 Gobo3 010-014 Gobo2 005-009 Gobo1 000-004 Open	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 000-127 Index	248-255 Marco30 240-247 Marco29 232-239 Marco28 224-231 Marco27 216-223 Marco26 208-215 Marco25 200-207 Marco24 192-199 Marco23 184-191 Marco22 176-183 Marco21 168-175 Marco20 160-167 Marco19 152-159 Marco18 144-151 Marco17 136-143 Marco16 128-135 Marco15 120-127 Marco14 112-119 Marco13 104-111 Marco12 096-103 Marco11 088-095 Marco10 080-087 Marco9 072-079 Marco8 064-071 Marco7 056-063 Marco6 048-055 Marco5 040-047 Marco4 032-039 Marco3 024-031 Marco2 016-023 Marco1 000-015 No Marco	128-255 Prism Effect 000-127 No Prism Effect	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 000-127 Index	128-255 Prism Effect 000-127 No Prism Effect

Ch16	Ch17	Ch18	Ch19	Ch20	Ch21
Prism3	R-Prism2	Focus	Strobe	Dimmer	Dimmer Fine
128-255 Color Prism Effect 000-127 No Color Prism Effect	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 000-127 Index	255 0	248-255 Open 240-247 Random Strobe 204-239 Slow Open Slow Close 168-203 Slow Close Fast Open 132-167 Slow Open Fast Close 016-131 008-015 On 000-007 Off	255 100% 0 0%	255 100% 0 0%

19 Channels Mode:

19 Channels Mode

Ch1	Ch2	Ch3	Ch4	Ch5	Ch6	Ch7	Ch8	Ch9
Pan	Pan Fine	Tilt	Tilt Fine	P/T Speed	Function	P/T Macro	P/T Macro Speed	Color 1
255 540° 0 0°	255 0	255 270° 0 0°	255 0	255 Fast 254 Slow 0 Fast	240-255 No Function 230-239 Lamp Off 220-229 Disable Blackout while P/T moving or Color change or Gobo change 210-219 Enable Blackout while P/T moving or Color change or Gobo change 200-209 Reset All 150-199 No Function 140-149 Pan/Tilt Reset 130-139 Lamp On 120-129 Disable Blackout while Gobo change 110-119 Enable Blackout while Gobo change 100-109 Disable Blackout while Color change 090-099 Enable Blackout while Color change 080-089 Disable Blackout while Pan/Tilt Move 070-079 Enable Blackout while Pan/Tilt Move 000-069 No Function	248-255 Marco31 240-247 Marco30 232-239 Marco29 224-231 Marco28 216-223 Marco27 208-215 Marco26 200-207 Marco25 192-199 Marco24 184-191 Marco23 176-183 Marco22 168-175 Marco21 160-167 Marco20 152-159 Marco19 144-151 Marco18 136-143 Marco17 128-135 Marco16 120-127 Marco15 112-119 Marco14 104-111 Marco13 096-103 Marco12 088-095 Marco11 080-087 Marco10 072-079 Marco9 064-071 Marco8 056-063 Marco7 048-055 Marco6 040-047 Marco5 032-039 Marco4 024-031 Marco3 016-023 Marco2 008-015 Marco1 000-007 No Marco	255 Slow 0 Fast	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 064-127 Index 059-063 Color12 054-058 Color11 049-053 Color10 044-048 Color9 039-043 Color8 034-038 Color7 030-033 Color6 025-029 Color5 020-024 Color4 015-019 Color3 010-014 Color2 005-009 Color1 000-004 White

Ch10	Ch11	Ch12	Ch13	Ch14	Ch15
Gobo 1	R-Gobo 1	Prism Marco	Null	Null	Null
255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 122-127 Gobo12 Shaking 117-121 Gobo11 Shaking 112-116 Gobo10 Shaking 107-111 Gobo9 Shaking 101-106 Gobo8 Shaking 096-100 Gobo7 Shaking 091-095 Gobo6 Shaking 086-090 Gobo5 Shaking 080-085 Gobo4 Shaking 075-079 Gobo3 Shaking 070-074 Gobo2 Shaking 064-069 Gobo1 Shaking 059-063 Gobo12 054-058 Gobo11 049-053 Gobo10 044-048 Gobo9 039-043 Gobo8 034-038 Gobo7 030-033 Gobo6 025-029 Gobo5 020-024 Gobo4 015-019 Gobo3 010-014 Gobo2 005-009 Gobo1 000-004 Open	255 Rotation Fast 194 Rotation Slow 190-193 Stop 189 Rotation Slow 128 Rotation Fast 000-127 Index	248-255 Marco30 240-247 Marco29 232-239 Marco28 224-231 Marco27 216-223 Marco26 208-215 Marco25 200-207 Marco24 192-199 Marco23 184-191 Marco22 176-183 Marco21 168-175 Marco20 160-167 Marco19 152-159 Marco18 144-151 Marco17 136-143 Marco16 128-135 Marco15 120-127 Marco14 112-119 Marco13 104-111 Marco12 096-103 Marco11 088-095 Marco10 080-087 Marco9 072-079 Marco8 064-071 Marco7 056-063 Marco6 048-055 Marco5 040-047 Marco4 032-039 Marco3 024-031 Marco2 016-023 Marco1 000-015 No Marco			

Ch16	Ch17	Ch18	Ch19
Focus	Strobe	Dimmer	Dimmer Fine
255 0	248-255 Open 240-247 Random Strobe 204-239 Slow Open Slow Close 168-203 Slow Close Fast Open 132-167 Slow Open Fast Close 016-131 008-015 On 000-007 Off	255 100% 0 0%	255 100% 0 0%

7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connect power and main fuse.
2. Measure the mains voltage on the main connector.
3. Check the power on LED to see if it can be light up or not.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if they are linked properly.
2. If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.
3. If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.
4. Try to use another DMX controller.
5. Check to see if the DMX cables run near or run alongside high voltage cables that may cause damage or interference to DMX interface circuit.

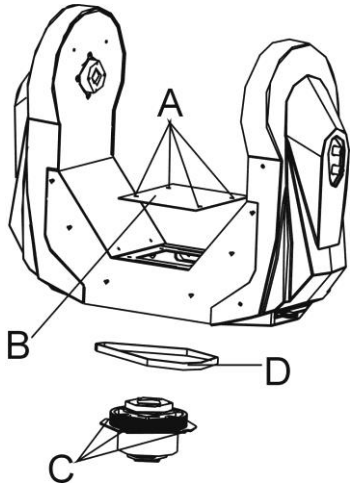
C. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.
2. The motor's drive IC on the PCB might be out of condition.

D. The lamp is cutting out intermittently

1. The lamp is not working well. Check the mains voltage either too high or too low.
2. Internal temperature may be too high. Check if replacement of fan is needed on the head.

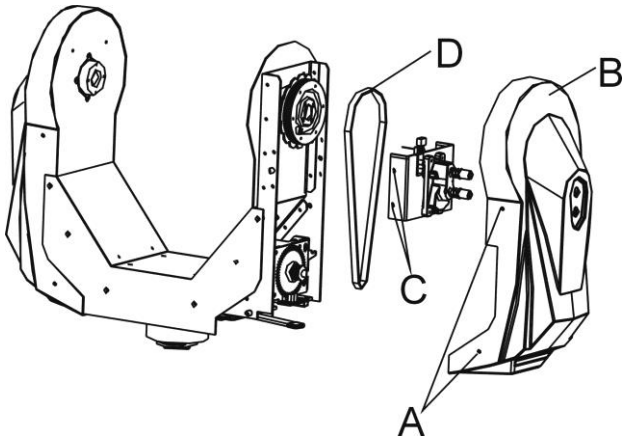
E. If The pan belt is broken



1. Turn off the mains power.
2. Loosen the screws (A), open the cover (B).
3. Loosen the screws (C).
4. Unplug all the connect wires over the belt.
5. Change a new belt (D), put the belt around the axis gear and motor gear.
6. Plug all the connect wires back upon the belt.
7. Tighten all the screws.

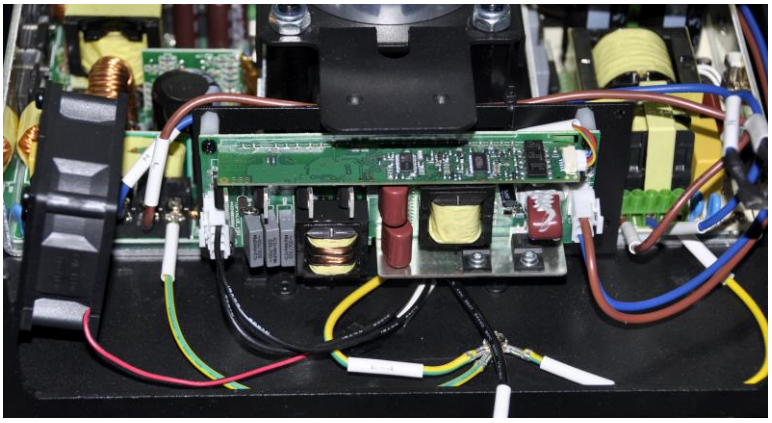
F. If The tilt belt is broken

1. Turn off the mains power.
2. Loosen all the screws (A) and open the right arm cover (B).
3. Loosen the screws (C) that fix the bridge.
4. Change a new belt (D). Please adjust the tension of the belt properly. Note: do not fix the belt too tight as it is can easily rupture.
5. Reverse the procedures from step 3 to 2.



8. Maintenance and Cleaning

Maintenance:



Ballast

A. As the pictures shown above, please replace the cable or cable joints immediately once they've turned yellow.

B. Do maintain the fixtures every two months and make sure that all the screws and terminals have been locked firmly to make sure the normal performance of the fixtures. Negligence of maintenance would cause malfunction of the fixture.

Cleaning:

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the unit's optics.

- Clean with soft cloth and use normal glass to clean fluid.
- Always dry the parts carefully.
- Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

Declaration of Conformity

We declare that our products (lighting equipments) comply with the following specification and bears CE mark in accordance with the provision of the Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1: 2009 ; EN55103-2: 2009; EN62471: 2008;
EN61000-3-2: 2006 + A1:2009 + A2:2009; EN61000-3-3: 2008.

&

Harmonized Standard

EN 60598-1:2008 + All:2009; EN 60598-2-17:1989 + A2:1991; EN 62471:2008;
EN 62493: 2010
Safety of household and similar electrical appliances
Part 1: General requirements

Innovation, Quality, Performance